



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 09/108,447 07/01/1998 GERALD N. COLEMAN 97-677 2408 EXAMINER 7590 01/29/2004 JOHNSON, JERRY D KENNETH D'ALESSANDRO SIERRA PATENT GROUP, LTD PAPER NUMBER ART UNIT P.O. BOX 6149 STATELINE, NV 89449 1764

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| $\bigcap V$ |   |
|-------------|---|
| TA          | ) |

| _ 12  | Application No.   | Applicant(s)                                       |
|---|---|--|
| •   | 09/108,447  | COLEMAN ET AL.                                     |
| Office Action Summary   | Examiner  | Art Unit   |
|   | Jerry D. Johnson  | 1764   |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status   |   |  |
| 1) Responsive to communication(s) filed on 14 Oc  | <u>ctober 2003</u> .  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ This a  | action is non-final.  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |
| Disposition of Claims   |   |  |
| 4) ⊠ Claim(s) <u>1,3-7,9 and 11-20</u> is/are pending in th 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1, 3-7, 9 and 11-20</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or   | vn from consideration.  | -  |
| Application Papers  |   |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex   | epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | e37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. §§ 119 and 120   |   |  |
| <ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a)  The translation of the foreign language provisional application has been received.</li> <li>14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first contents of the appointment of the provisional path Sheet.</li> <li>37 CFR 1.78.</li> </ul> |   |  |
| reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.   |   |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  | 5) Notice of Informal P   | (PTO-413) Paper No(s) atent Application (PTO-152)  |

Application/Control Number: 09/108,447

Art Unit: 1764

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-7, 9 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubin in view of WO 95/27021 and Schwab.

Dubin, U.S. Patent 5,284,492, teaches an enhanced lubricity water and fuel oil emulsion (column 3, lines 31-37). The emulsion can be either a water in fuel oil or a fuel oil in water emulsion (column 3, lines 41-44). The oil phase comprises a light fuel oil, by which is meant a fuel oil having little or no aromatic compounds and consists essentially of relatively low molecular weight aliphatic and naphthenic hydrocarbons (column 3, lines 45-49). Such fuels include fuels conventionally known as, inter alia, diesel fuel (column 3, lines 61-68). The emulsions advantageously comprise water-in-fuel oil emulsions having up to about 90% water by weight. The emulsions which have the most practical significance in applications when combusted alone are those having about 5% to about 50% water and are preferably about 10% to about 35% water-in-fuel oil by weight (column 4, lines 7-15). Although demineralized water is not required, the use of demineralized water in the emulsion is preferred (column 4, lines 30-35). The emulsions are prepared such that the discontinuous phase preferably has a particle size wherein at least about 70% of the droplets are below about 5 microns Sauter mean diameter. More preferably, at least about 85%, and most preferably at least about 90% of the droplets are below about 5 microns Sauter mean diameter (column 4, lines 38-44). An emulsification system is most preferably employed to maintain the emulsion. A desirable emulsification system comprises about 25% to about 85% by weight of an amide, especially an alkanolamide or n-substituted alkyl amine; about 5% to about 25% by weight of a phenolic surfactant; and about 0% to about 40% by weight of a difunctional block polymer terminating in a primary hydroxyl group (column 5,